

IN THE SPECIFICATION:

On page 6, please replace the paragraph starting at line 8 with the following rewritten paragraph:

Resistors R1 and R4 preferably exhibit a ~~positive~~ negative elongation or are elongated by displacement of the membrane 12, which occurs in response to an increase in the pressure of the medium. Resistors R2 and R3 preferably exhibit a ~~negative~~ positive elongation or are compressed by displacement of the membrane 12, which occurs in response to an increase in the pressure of the medium.

On page 6, please replace the paragraph starting at line 13 with the following rewritten paragraph:

The ~~positive~~ negative elongation of resistors R1 and R4 is preferably designed to be about equivalent to the ~~negative~~ positive elongation of resistors R2 and R3 to simplify compensation for these quantities in the full Wheatstone bridge. Equivalence of these elongations is preferably achieved through placement of the resistors R1, R2, R3, and R4 on the membrane 12, which may be determined by, for instance, computer modeling and/or simulation.

On page 7, please replace the paragraph starting at line 9 with the following rewritten paragraph:

The Wheatstone bridge preferably also includes additional trimming resistors, such as trimming resistor R5 shown in Figures 1[[, 2,]] and 4, which are preferably cut to yield a desired resistance. These trimming resistors are preferably used to compensate for offset voltages due to imbalances in the branches of the Wheatstone bridge.

On page 10, please replace the paragraph starting at line 16 with the following rewritten paragraph:

As shown in Figure 4, resistors R1, R2, R3, and R4 are preferably connected in a Wheatstone bridge configuration with trimming resistor R5. Resistors R1 and ~~[[R4]]~~ R3 are connected at node P1, resistors R3 and R4 are connected at node P4, resistors R1 and R5 are connected at node P3, and resistors R2 and ~~[[R3]]~~ R4 are connected at node P2. A voltage source 44 is preferably connected in parallel across nodes P1 and P2.